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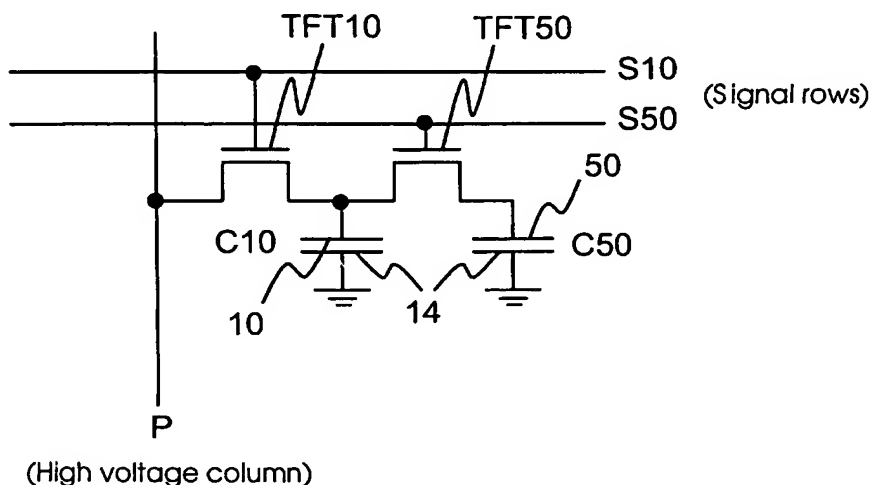
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(54) Title: ELECTRICAL DEVICE UTILIZING CHARGE RECYCLING WITHIN A CELL



(57) Abstract: The invention relates to an electrically controlled device, which device comprises at least one electrically and individually controllable cell (L, R) with a least two separate electrode structures (10, 50) arranged within said cell each of said electrode structures capable of storing electric charges (C10, C50). According to invention the device comprises further charge transfer means (P, S10, S20, TFT10, TFT50) to transfer electric charges in a temporally controlled manner between said at least two separate electrode structures (10, 50), and that for at least one of said the electrode structures within said cell, said charge transfer means comprises substantially the only means for

providing electrical power and or electrical driving. The invention reduces the power consumption of the electrode structures by use of new type of in-cell type charge recycling. The invention is especially suitable to be used in light modulator components based on the use of electrically deformable viscoelastic materials.